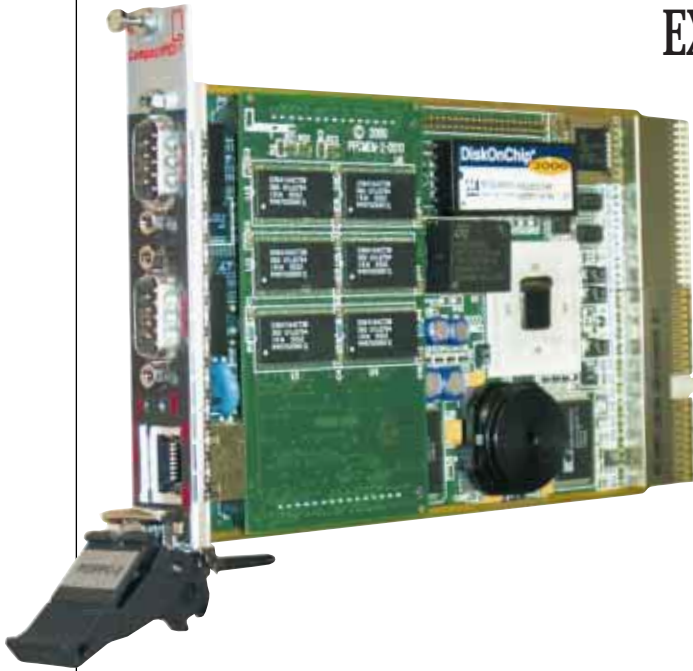


EXT. TEMP. HIGH SPEED COMPUTING

66 MHz 64-bit

PowerPC® 750 CPU Board



The PCIPPC-2/2X integrates the high performance PowerPC G3 architecture onto a 3U single-slot CompactPCI board which is compliant with the PICMG™ 2.1 R2.0 Full Hot Swap specifications. The low power design, coupled with the compact and robust Eurocard format (100 x 160 mm) makes this PowerPC 750 core-based design ideal for high end computing and embedded applications such as high speed data communication and real time machine control.

The PCIPPC-2/2X is one of the first boards compliant with the PICMG™ 2.0 R3.0 specifications, implementing an auto-configuration feature for 32 or 64-bit and 33 or 66 MHz PCI data transfers. In addition, the availability of an operating extended temperature version from -40° C to +85° C, makes it suitable for industrial and transportation applications.

The PowerPC 750 processor is designed with a direct PCI bus interface. Because no PCI to PCI bridge is used to

interface the CPU functions to the backplane, large burst packets of data can be transferred without degrading the performance of the PCI bus. The CPC710-100 chipset bridges the 60X 64-bit processor bus to the CompactPCI bus, generates a separate PCI local bus and manages the 128-bit memory access at 100 MHz.

The PCIPPC-2/2X provides up to 1 MB of L2 Cache, sockets for 512 kB of boot ROM and up to 512 MB of high speed ECC SDRAM organised in two 72-bit banks and implemented on a low profile mezzanine module. Non-volatile disk storage can be achieved using a DiskOnChip® Flash Disk device of 288+ MB. A full-duplex 10/100 Mbps Ethernet interface is provided using the Intel® 82559ER PCI-Fast Ethernet controller. Two serial ports are implemented, offering RS-232/422/485 interfaces at up to 460 kbauds.

The PCIPPC-2/2X can act both as a system-slot and as a peripheral-slot adapter board. The board also features two 24-bit timers, a watchdog circuit and 8 kB of 8-bit battery-backed SRAM. A digital I/O port is used to implement an optional IDE interface, or this port can be used for the implementation of custom functions. The 3U front panel features two serial ports and a 10Base-T/100Base-Tx Ethernet connector, and is fully compliant with the EMC requirements.

The PCIPPC-2/2X board is an excellent platform to run real time operating systems such as VxWorks®.



300 400 500 603e604 750 MHz

Shaping Innovative Embedded Solutions

VxWorks®



Technical features

CPU:

- PowerPC 750 @ 300 to 500+ MHz
- CPC710-100 Dual PCI host bridge and memory controller

Memory:

- Up to 1 MB Level 2 Cache Memory
- 64 to 512 MB ECC SDRAM on a low profile mezzanine memory board of two 72-bit banks
- 512 kB FlashEPROM Boot
- 288+ MB Flash Disk (DiskOnChip 2000)
- 8 kB battery-backed SRAM

Ethernet:

- Intel 82559ER Ethernet Controller
- Fast Ethernet 10Base-T / 100Base-Tx (10/100 Mbps)

Peripheral Ports:

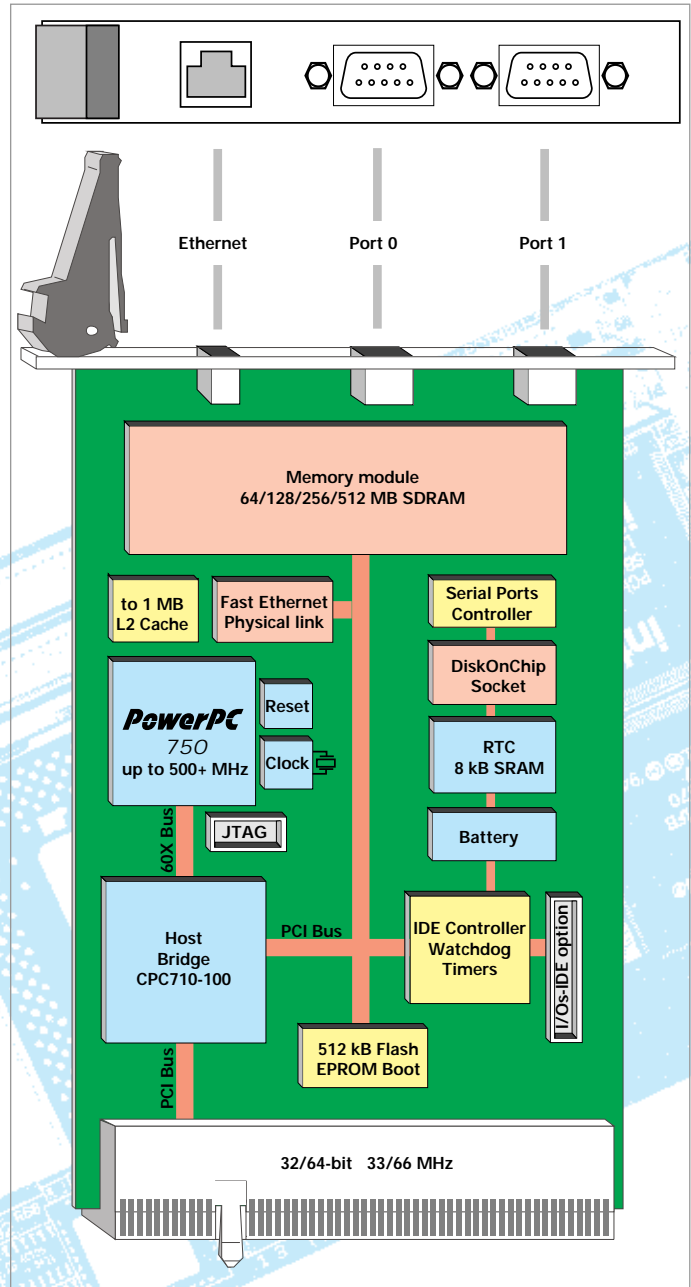
- Two RS-232/422/485 Serial Ports at 460 kbaud maximum transfer rate. Configurable via software.
- RJ45 Fast Ethernet interface

CompactPCI Interface:

- 3U format (100x160mm), 4HP Front Panel
- Compliant with the PICMG™ 2.1 R2.0 Full Hot Swap specifications
- 3.3V/5V signalling
- Fully compliant with CompactPCI Bus specifications PICMG™ 2.0 R3.0
- Automatic System/Peripheral selection on the CompactPCI Bus
- 32/64-bit, 33/66 MHz CompactPCI Bus Access
- Power consumption: +5V/2A, +3.3V/3A Typical

Additional Features:

- Real Time Clock, Watchdog, two 24-bit timers, optional IDE controller.
- Extended Temperature version available on request -40°C to +85°C (operating).
- Custom functions implemented through the digital I/O connector available on request.



Order Information

PCIPPC-2E1 y 3U PowerPC 750@300 MHz, 1 MB L2C, Fast ETH interface, COM 1-2

PCIPPC-2M1 y 3U PowerPC 750@500 MHz, 1 MB L2C, Fast ETH interface, COM 1-2

y = A for 64MB SDRAM, B for 128 MB, C for 256MB, D for 512MB

X-suffix for extended temperature version -40° -- +85°C

FlashDisk device on request



Shaping Innovative Embedded Solutions

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